Avocent

SwitchView® OSD

Installer/User Guide

INSTRUCTIONS
This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

DANGEROUS VOLTAGE
This symbol is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

POWER ON
This symbol indicates the principle on/off switch is in the on position.

POWER OFF
This symbol indicates the principle on/off switch is in the off position.

PROTECTIVE GROUNDING TERMINAL
This symbol indicates a terminal which must be connected to earth ground prior to making any other connections to the equipment.

SwitchView® OSD

Installer/User Guide

FCC Notification

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Canadian Notification

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe A prescrites dans le Règlement sur le brouillage radioélectrique édicté par le Ministère des Communications du Canada.

VCCI Approvals

　この装置は、情報処理装置等電波障害自主規制協議会（ＶＣＣＩ）の基準に基づくクラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

Agency Approvals

UL 1950, CSA C22. 2 No. 950, EN60950, IEC 950

FCC part 15A, EN55022, EN50082

SwitchView® OSD *Installer/User Guide*

Contents

Product Overview

Contents

Product Overview

Feature Overview

The SwitchView OSD allows you to control up to 64 PCs with one keyboard, monitor and mouse. Each computer can be up to 30 feet away from the SwitchView OSD. The SwitchView OSD works with IBM PC/AT and PS/2 systems, and 100% compatible machines with support for VGA, SVGA, XGA and XGA-II video. PS/2 keyboard and PS/2 mouse peripherals are supported through the rear of the unit.

Expansion for up to 64 computers
A SwitchView OSD unit will support from one to eight attached PCs, or channels. If more than eight channels are needed, multiple units can be cascaded together for expansion. Up to 2 tiers of units can be connected for a total of 64 attached computers in one system.

AutoBoot technology
The AutoBoot feature boots all attached servers during initial power-up or after a power failure. PCs are booted transparently without operator intervention, and may be powered-up one-at-a-time or all at once. When the power stabilizes, a channel may be selected. The first available channel is automatically selected upon power-up of the base SwitchView OSD.

On-screen display capability
Configure and control your SwitchView OSD with on-screen menuing! Name your computer channels anything you wish, then select the desired computer from an easy-to-use menu. Secondary menus let you configure and initiate channel scanning and other system features.

Advanced security for total control over system access
Use the advanced bi-level security feature to configure and control server access for every type of user in the system. The administrator has full access privileges; individual users can have viewing or viewing/editing capability for each attached server.

IntelliMouse support
The SwitchView OSD offers full support for the Microsoft IntelliMouse.

OSD Configuration Utility
The OSD Configuration Utility allows the administrator to easily configure and download a channel list with defined users and access privileges to the

entire system. This utility will also read and save your current configuration for extra security.

Push-button & keyboard switching

In addition to using the on-screen menus, you can switch computer channels with a simple keyboard sequence. You can also cycle through active channels with SwitchView OSD's select button.

"Keep Alive" feature

SwitchView OSD's "Keep Alive "feature allows attached servers to power the unit in the event of a SwitchView OSD power failure. This prevents attached PCs from locking up and keeps you from losing time and data.

Built-in scanning capabilities

A built-in scanning feature allows you to automatically monitor, or scan, your PCs without intervention. When keyboard activity is detected, scanning is suspended until all activity stops. Scanning then resumes with the next channel in sequence.

Figure 1   **A typical SwitchView OSD configuration is shown below.**
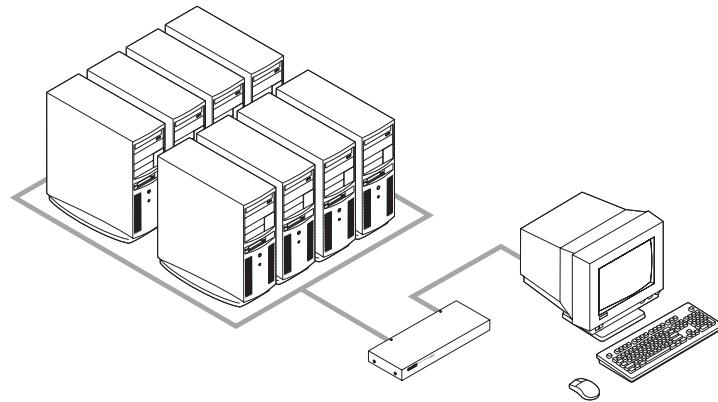
Compatibility

XGA/XGA-II support

If you wish to use XGA or XGA-II video, you will need to purchase an adaptor available through Avocent.

Installation

Contents

Installation

Basic Install

1. Power-down all computers that will be part of your SwitchView OSD system.

Connecting your Peripherals

2. Locate your PS/2 keyboard, VGA video monitor and PS/2 mouse.

3. Plug your VGA monitor cable into the blue ☐ port on the back of your SwitchView OSD in the user console section. Plug your PS/2 keyboard cable into the purple ⌨ port and your PS/2 mouse cable into the green 🖱 port.
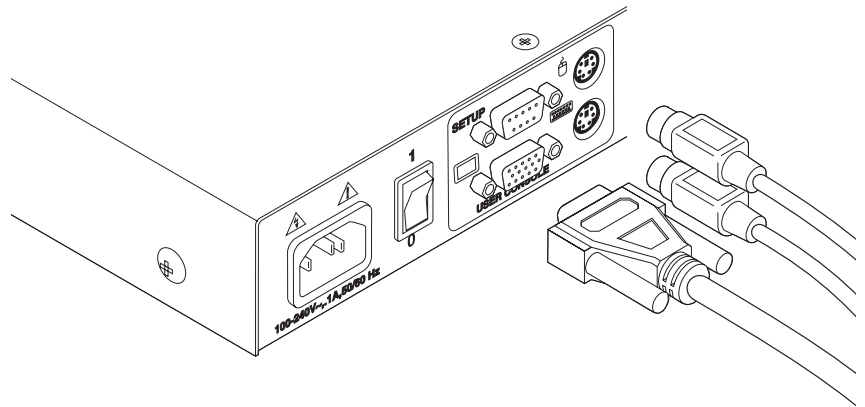
Connecting Computers to the SwitchView OSD

4. Locate your first expansion cable. There will be one 6-foot cable ending with three connectors on each end: one 15-pin "HDD " for your video, one 6-pin miniDIN connector for a PS/2 keyboard connection, and one 6-pin miniDIN connector for a PS/2 mouse connection.

    Choose an available port, labeled A-H, on the rear of your SwitchView OSD unit. Plug the video expansion cable connector into the blue ⬜ port of your chosen channel. Plug the PS/2 keyboard expansion cable connector into the purple ⌨ port. Plug the mouse expansion cable connector into the appropriate green 🖱 port.

5. Plug the remaining ends of the video, PS/2 keyboard and mouse expansion cables into the matching ports on your computer.

6. Locate your next set of expansion cables. Repeat steps 4 and 5 until all computers are properly attached to the SwitchView OSD.
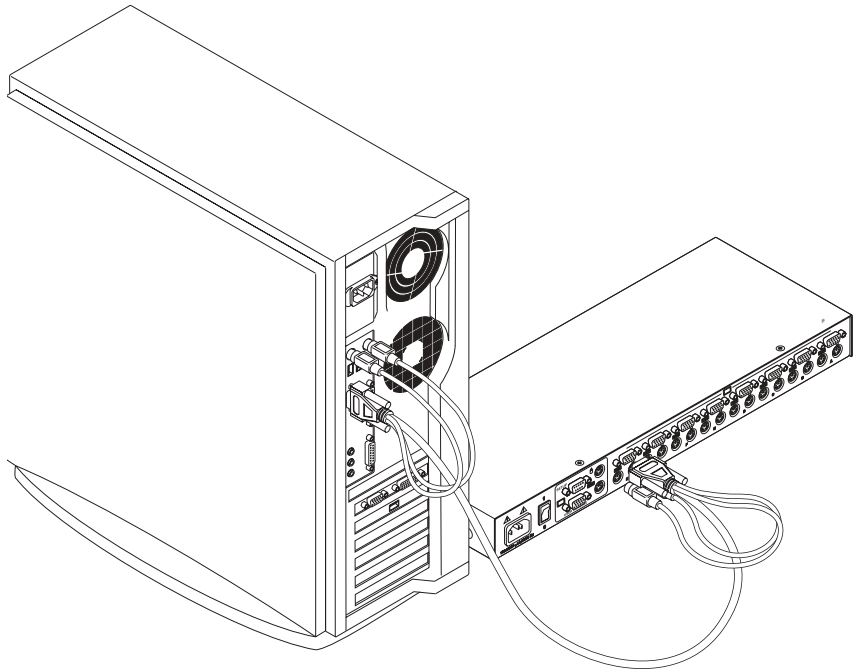
7. Locate the power cord that came with your SwitchView OSD unit. Plug it into the power socket on the rear of the SwitchView OSD unit. Plug the other end into an appropriate AC wall outlet.
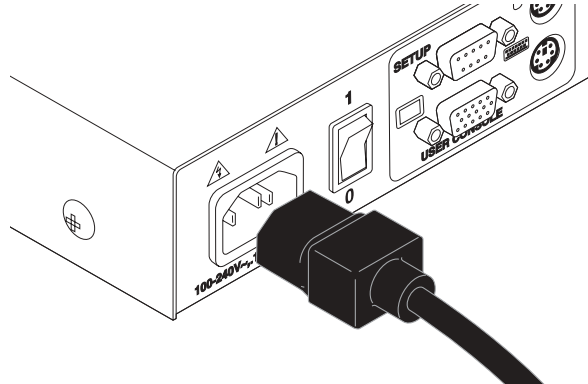
8. Power-up your SwitchView OSD unit first, then power-up all attached computers.

The SwitchView OSD and all attached computers should be powered-down before servicing the unit. Always disconnect the power cord from the wall outlet.

Advanced Install

Attaching Multiple SwitchView OSD Units to your System

1. Follow steps 1-6 of the Basic Install section.

2. Locate an available set of expansion cables. Choose an unused port, labeled A-H, on the rear of your SwitchView OSD unit. Plug the video expansion cable connector into the blue ▢ port of your chosen channel. Plug the PS/2 keyboard expansion cable connector into the purple ⌨ port. Plug the PS/2 mouse expansion cable connector into the green PS/2 🖰 port.

3. Plug the remaining end of the video expansion cable into the blue ▢ port of the user console section on your second SwitchView OSD unit. Plug the PS/2 keyboard expansion cable connector into the purple ⌨ port. Plug the PS/2 mouse expansion cable connector into the green 🖰 port.
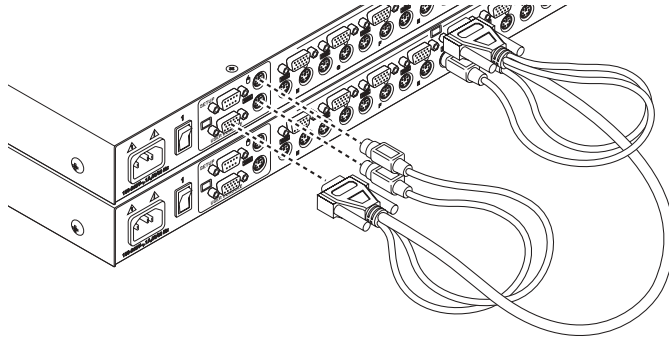
4. Repeat steps 2-3 for every cascaded SwitchView OSD unit in your system.

5. Power-up your SwitchView OSD units first, then power-up all attached computers.

Basic Operations

Contents

Basic Operations

Overview

Your SwitchView OSD may be operated in a non secure (no password required) or secure (password required) mode. All units ship defaulted to the non-secure mode. For information on implementing password security see the "Administrator Functions "section of chapter 4.

PCs may be powered-up one-at-a-time or all at once. No operator intervention is required during booting. When the system stabilizes, a PC may be selected via the on-screen display menu or keyboard hot-key sequence.

As the system stabilizes, the green LED over each channel will light, indicating that the attached computer is powered on. A PC may now be selected via the on-screen display menu or, if you are in non-secure mode, the Select button or keyboard hot-key sequence. The amber LED will light at the active computer.
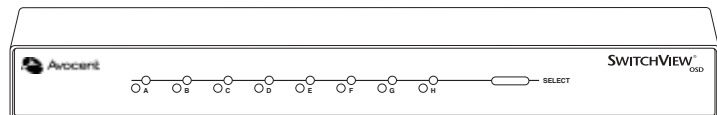
Keyboard Control

The following notational conventions appear throughout this chapter to illustrate commands for operating the SwitchView OSD. Whenever you see one of the symbols listed on the left side of the table, substitute the corresponding steps or values listed on the right side of the table.

Convention	Key Sequence or Value
\<CM\>	Enter Command Mode: 1. Press and hold down the 'Num Lock' key. 2. Press and release the minus (-) key on the numeric keypad. 3. Release the 'Num Lock' key. Note: For alternate hot-key sequences, see 'System Control & Maintenance' later in this chapter.
\<Enter\>	Press the 'Enter' or 'Return' key. The **\<Enter\>** command is used to execute an instruction and exit from Command Mode.
Addr	The letters over the LEDs on your SwitchView OSD are your PCs' addresses. Enter the letter, A-H, for the PC you're selecting. For cascaded systems, enter the address of the base unit followed by the channel of the system you want to select. Example: You have a SwitchView OSD unit cascaded from channel B of your base unit. To access the PC at channel C of this second (cascaded) unit, enter **BC**.
\<ESC\>	Press the 'Escape' key. The **\<ESC\>** command is used to exit Command Mode without executing an instruction.

Keyboard Switching

One of the ways to change the active channel in a non-secured SwitchView OSD system is by entering a short sequence of keystrokes on the keyboard. This is called keyboard, or hot-key, switching.

Note: Hot-key switching is only available in the default non-secure state. For more information on secure versus non-secure operation, see the 'Administrator Functions' section of Chapter 4.

The first set of keystrokes places your system in Command Mode. As long as you are operating in Command Mode, whatever you type will be interpreted as channel switch commands until the Enter or the Escape key is pressed to terminate Command Mode. None of the keystrokes entered will be forwarded to the attached computer until you exit Command Mode.

Next, enter the address *(Addr)* for the channel you wish to select.

Press **Enter** to accept the new channel. The following command line shows the proper format used to switch your active channel via keyboard.

Key Sequence	Action
<CM> *Addr* **<Enter>**	Selects an active channel via keyboard.

Below is a sample of a keyboard switching session, with an accompanying explanation for each step.

Key Sequence	Action
1. **<CM>** E **<Enter>**	Selects Channel E on the base unit as the active channel.
2. **<CM>** CF **<Enter>**	Selects the SwitchView OSD attached to channel C on the base unit, then selects channel F on the cascaded unit.
3. **<CM>** G **<Enter>**	Selects Channel G on the base unit as the active channel.
4. **<CM>** BA **<ESC>**	Exit Command Mode. The instruction is not executed. Channel G is still the active channel.

System Control & Maintenance

The following commands are used for system control and maintenance. Enter the command sequences to perform the actions described in the table below.

Key Sequence	Action
\<CM\>K*n***\<Enter\>**	Sets the keyboard scan set where *n* is a scan set number 1-3.
\<CM\>MR**\<Enter\>**	If you hot-plug your mouse cable, you may experience a loss of mouse signal. Use this command to restore the signal if you are using a PC with a standard PS/2 mouse driver.
\<CM\>MW**\<Enter\>**	If you hot-plug your mouse cable, you may experience a loss of mouse signal. Use this command to restore the signal if you are using a PC with a Microsoft IntelliMouse driver.
\<CM\>AV**\<Enter\>**	Displays the current firmware version of the processors inside your SwitchView OSD unit. You must be either at a DOS prompt or in a text editor/word processor to view this information.
\<CM\>H1**\<Enter\>**	Changes the hot-key sequence to the default: 1. Press and hold down the 'Num Lock' key. 2. Press and release the minus (-) key on the numeric keypad. 3. Release the 'Num Lock' key.
\<CM\>H2**\<Enter\>**	Changes the hot-key sequence to the 1st alternate: 1. Press and hold down the 'Num Lock' key. 2. Press and release the asterisk (*) key on the numeric keypad. 3. Release the 'Num Lock' key.
\<CM\>H3**\<Enter\>**	Changes the hot-key sequence to the 2nd alternate: 1. Press and hold down the 'Control' key. 2. Press and release the tilde (~) key. 3. Release the 'Control' key.
\<CM\>ZM**\<Enter\>**	Use this command to resynchronize the mouse after a device or computer hot-plug. Repeat, if necessary, until synchronization is re-established. Note: Using this command while the mouse is operating correctly will cause the mouse to lose sync.

On-Screen Display Operations

Contents

On-Screen Display Operation

Activating OSD

Activate on-screen display (OSD) by pressing either of the keyboard **Control** keys twice within one second. In nonsecure mode, this brings up the main OSD Window, "Administrator Channel List".

In secure mode, activating OSD will bring up the "User Login" window. Type in your user name and press **Enter**. The system administrator should login as "Admin", "Root" or "Administrator". If the user name is valid, the password window will appear. Type your password and press **Enter**. This will bring up your "Channel List". If there is no keyboard activity, the login window will timeout after 5 minutes and go to a Avocent screen saver. Press any key to restore the login prompt.

Note: All SwitchView OSD units ship in the default non-secure state. For more information on secure versus non-secure operation, see the section 'Administrator Functions. '

The OSD Window

This window lists all named channels in your SwitchView OSD system. They will be listed alphabetically with their channel addresses and access status beside them. When in secure mode, only the channels that are accessible to the logged in user will be listed. (See the section 'Administrator Functions' for more information.)

Avocent Control Panel		
Administrator Channel List		
Name	**Address**	**Access**
Accounting	**F**	**K**
Engineering	**E**	**K**
John's PC	**C**	**VK**
Mail Server	**A**	**VK**
Pam's PC	**B**	**VK**
Shop Floor	**D**	**K**
		F10-Logout

Use your up and down arrow keys, the page up and down keys, or your mouse to select a channel. Move immediately to the top or bottom of the list with the home and end keys. Press a letter while in the main OSD Window, and the Highlight Bar moves to the first channel name beginning with that letter. Press the letter repeatedly to scroll through all channels that begin with that letter from top to bottom. Press **Enter** to make the switch. To exit the OSD Window without changing channels, press **Esc**. To manually logout when in secure mode, press **F10**.

The Command Menu

Once you have activated the main OSD Window, you can open the Command Menu by either pressing the **Control** key twice or by typing **ALT-M**.

```
            Avocent Control Panel
        Administrator Command Menu

    Channel Maintenance
    Administrator Functions
    Turn Scanning ON
    Scanning Order
    Sequential Scan Dwell Time
    Reset Standard Mouse/Keyboard
    Reset Wheel Mouse/Keyboard
    Version Information

    ENTER-accept           ESC-previous
```
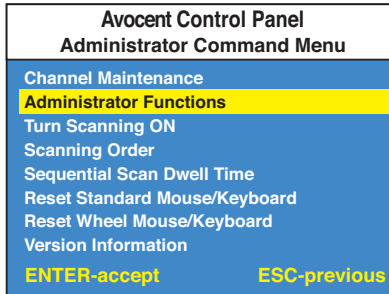
The Command Menu options are selected in the same manner as channels in the OSD Window. Scroll the Highlight Bar up and down and press **Enter** when your selection is highlighted.

If you are operating in non-secure mode or are the system administrator, you will have several options that do not appear in the User level Command Menu: Channel Maintenance, Administrator Functions and Sequential Scan Dwell Time. Channel Maintenance and Administrator Functions are both covered in separate sections in this chapter. Scanning is covered in Chapter 5.

If you experience a loss of mouse signal while using the SwitchView OSD, select the 'Reset Standard Mouse/Keyboard' option from this menu for a PC with a standard mouse driver or 'Reset Wheel Mouse/Keyboard' if you are using a PC with a Microsoft IntelliMouse driver. This will reset and in most cases restore your mouse signal. These commands are equivalent to the **<CM>** MR **<Enter>** and **<CM>** MW **<Enter>** keyboard command listed in the 'System Control & Maintenance' section of this manual.

Choose the option 'Version Information' to display on your monitor the current version level of your OSD firmware. Press the **Esc** key to clear this information from your screen.

Basic Channel Maintenance

The Channel Maintenance Menu is accessed from the Administrator Command Menu, and is available if you are operating in non-secure mode or if you are the system administrator. Here you can add, delete or alter individual channels.

Adding New Channels (base unit only)

1. Select 'Add channel' from the Channel Maintenance Menu. Type in a new channel name, up to 14 characters long, and press **Enter**.

2. Type in the channel letter for the PC you are naming and press **Enter**.

3. When prompted for another cascade level, type **N** and press **Enter**.

Press **Esc** at any point to exit this operation without adding the channel.

Adding New Channels (with a cascaded unit)

1. Select 'Add channel' from the Channel Maintenance Menu. Type in a new channel name, up to 14 characters long, and press **Enter**.

2. Type in the SwitchView OSD channel letter that corresponds to the port that the second cascaded SwitchView OSD unit is attached to and press **Enter**.

3. When prompted for another cascade level, type **Y** and press **Enter**.

4. Enter the letter that corresponds to the computer port on the cascaded SwitchView OSD you are adding and press **Enter**.

5. When you have finished adding levels (up to two total), type **N** when prompted for another cascade level and press **Enter**.

Press **Esc** at any point to exit this operation without adding the channel.

Deleting an Existing Channel

1. Highlight the channel you wish to delete in the main OSD Window.

2. Press the **Control** key twice or type **Alt-M** to access the Command Menu.

3. Select 'Channel maintenance' from the Command Menu.

4. Choose the 'Delete channel' option.

5. Type **Y** or **N** at the prompt to confirm the deletion and press **Enter**.

Changing Channel Names and Addresses

1. Highlight the channel you wish to change in the main OSD Window.

2. Press the **Control** key twice or type **Alt-M** to access the Command Menu.

3. Select 'Channel maintenance' from the Command Menu.

4. Choose the appropriate option.

5. Enter the new channel name or address and press **Enter** to accept.

Press **Esc** at any point to exit this operation without saving the changes.

The ID Window

The ID Window appears when you change channels and displays the name of the selected channel. This window can be individually configured for each channel in your system. The characteristics of the ID Window can be changed from the Channel Maintenance Menu. This option is only available if you are operating in non-secure mode or if you are the system administrator.

Changing the Size, Color and Position of the ID Window

1. From the main OSD Window, press the **Control** key twice or type **Alt-M** to access the Command Menu.

2. Select 'Channel maintenance' from the Command Menu.

3. Choose the option 'Options for ID window'.

Follow the procedures outlined in the table below to change the size, color or position of your ID Window.

Operation	Procedure
Move the ID Window	Use the arrow keys or mouse to move the ID Window's position on the monitor. If the window flickers but does not move, continue tapping the arrow keys until it moves back into range.
Change window background color	Press the **<PAGE UP>** key to cycle through the available window background colors.
Change text color	Press the **<PAGE DOWN>** key to cycle through the available text colors.
Change window size	Use the **(+)** and **(-)** keys to change the length of the ID Window.

4. Press **Enter** to accept the changes or press **Esc** to exit the menu without saving the changes.

Setting the ID Window Dwell Time

This menu selection lets you set the time that the ID Window remains on screen after a channel switch. Each channel can be configured independently. The default time is set for 5 seconds.

1. From the main OSD Window, press the **Control** key twice or type **Alt-M** to access the Command Menu.

2. Select 'Channel maintenance' from the Command Menu.

3. Choose the option 'Dwell time for ID window'.

4. Enter a number between 0-255 seconds. Entering **0** disables the ID Window. Entering **255** allows the ID Window to stay on screen the entire time the channel is active.

Administrator Functions

The Administrator Functions Menu is accessed from the Command Menu. Here, you can create an administrator password, set a system logout time and create individual user logins with specific access and privileges. **This menu is only used if you are running your system in secure mode.** If you config-ure an administrator password from this menu, your system will then be in secure mode. A lock symbol will appear to the right of the menu headings to indicate secure operation. If you wish to keep your system in the default non-secure mode, return to the Command Menu. For the differences between secure and non-secure modes, see below.

Differences between Secure and Non-Secure Operating Modes

Administrator Password
Entering an administrator password places your system in secure mode. Non-secure systems do not use passwords. To return your system to the default of non-secure mode, simply delete the administrator password. When the administrator password is enabled, user passwords must also be entered or the switch will not be completely secure. The default for users is no password. Simply hit the enter key at the prompt.

Logout Capability
You have the option of automatically logging out of the system after an administrator defined period of inactivity. Timeout values can be set from 0 to 60 minutes. A value of 0 keeps the user logged in continuously. When the timeout is reached, the current channel is deselected and the display goes to screen saver mode. Users must login again to access system computers. This option is only available in secure mode.

Multiple User Logins
You can create up to four user logins in addition to the system administra-tor. Use these logins to configure and control server access for every type of system user. The administrator has full access privileges; additional users can have viewing or viewing with keyboard and mouse control capability for each attached server. This option is only available in secure mode.

Hot-Key Channel Selection
While in secure mode, all hot-key channel selection methods are disabled. All other hot-key commands remain operational to the administrator only. In non-secure mode hot-key commands function normally.

Creating the Administrator Password

1. Press the **Control** key twice or type **Alt-M** to access the Command Menu.

2. Select 'Administrator Functions' from the Command Menu.

3. Select 'Administrator Password' from the Administrator Menu.

4. Type your password and press **Enter**. (The password is not case sensitive.)

5. Repeat entry of the password for confirmation.

CAUTION: Security is enabled once the password has been created. Store a copy of your password in a safe place.

You should now see the option 'F10 - Logout' at the bottom of your main OSD Window and a lock symbol to the right of the menu headings.

Setting the Administrator Logout Time

1. Press the **Control** key twice or type **Alt-M** to access the Command Menu.

2. Select 'Administrator Functions' from the Command Menu.

3. Select 'Administrator Logout Time' from the Administrator Menu.

4. Enter the number of minutes you wish to pass without keyboard/mouse activity before the administrator is automatically logged out of the system. The default of 0 keeps the administrator logged on continuously; 60 is the maximum setting.

Setting Up Additional Users

1. Press the **Control** key twice or type **Alt-M** to access the Command Menu.

2. Select 'Administrator Functions' from the Command Menu.

3. Select 'Setup User 1' from the Administrator Menu.

4. Choose the 'Name' sub-menu and enter the name for this user.

5. Choose the 'Password' sub-menu and enter the password and confirm it for this user. (Passwords are not case sensitive.)

6. Choose the 'Access' sub-menu. Here, you will see a listing of all attached servers in the channel list. For each server, choose a level of access for this user by selecting one of the function keys listed on the screen: F5 for no access, F6 for video only or F7 for video and keyboard/mouse capability. The default is set for full access. All changes go into effect as soon as they are made. Press **Enter** when you have completed your configuration.

7. Choose the 'Logout Time' sub-menu. Enter a value in minutes for this user's logout time. A value of 0 keeps the user logged on continuously; 60 is the maximum setting. The default is set for 5 minutes.

8. Press **Enter** to accept your selections and repeat steps 3-8 for each remaining user.

Channel Scanning

Contents

Channel Scanning

Choosing a Scanning Method

SwitchView OSD's scanning feature allows you to automatically monitor, or scan, your computer channels without intervention. When keyboard activity is detected, scanning is suspended until all keyboard activity stops. Scanning then resumes with the next channel in sequence. Mouse activity will not affect scanning in any way. The length of time each channel remains on the screen, or dwell time, is configurable and can be changed at any time.

There are two ways to scan through the channels in your SwitchView OSD system, either sequentially or alphanumerically.

Scanning sequentially allows you to view each of your active channels in the order that they are attached to the SwitchView OSD. The amount of time each channel remains on the screen, or dwell time, is configurable and is the same for all channels.

Scanning alphanumerically allows you to scan all your channels in alphanumeric order according to the channel list in the main OSD Window. With this scan method, you can adjust the dwell time for each channel or omit a channel from the scan sequence completely.

Choose whichever method is most appropriate for your configuration.

Setting the Scanning Order

1. From the main OSD Window, press the **Control** key twice or type **Alt-M** to access the Command Menu.

2. Choose 'Scanning order' from the menu.

3. Select either 'Sequential order' or 'Alphanumeric order'.

4. Press **Enter**.

Turning Scanning On and Off

From the OSD menu.

1. From the main OSD Window, press the **Control** key twice or type **Alt-M** to access the Command Menu.

2. Select 'Turn scanning ON' or 'Turn scanning OFF' from the menu. This is a toggle option - only one scanning option will show on the menu at any one time.

3. Press **Enter**.

By keyboard hot-key sequence (System Administrator or non-secure mode only)

The following key sequences control scanning.

Key Sequence	Action
<CM>SG**<Enter>**	Enables the scan Go command.
<CM>SH**<Enter>**	Enables the scan Halt command.

Setting the Scanning Dwell Time

(System Administrators and non-secure mode users.)

For Sequential Scanning
1. From the main OSD Window, press the **Control** key twice or type **Alt-M** to access the Command menu.

2. Choose the option 'Sequential Scan Dwell Time. '

3. Enter a number between 2-60 seconds. The value you enter will be the dwell time for each active channel in the system.

For Alphanumeric Scanning
1. Highlight the channel that you wish to configure in the main OSD Window.

2. Next, press the **Control** key twice or type **Alt-M** to access the Command Menu.

3. Select 'Channel Maintenance' from the Command Menu.

4. Choose the option 'Alpha Scan Dwell Time'.

5. Enter a number between 0-255 seconds. Enter **0** to skip a channel during scanning.

Scanning and Security

In non-secure mode, you may scan your channels either alphanumerically according to your channel list or sequentially through all attached servers. Note that with sequential scanning, you will pause at every active channel, regardless of whether that channel has been added to the channel list or not.

In secure mode, you will only scan through channels that appear on the channel list, regardless of the scanning method chosen.

Appendices

Contents

Appendices

Specifications

| Mechanical	Height: 1. 7" (4. 5 cm)
	Width: 17. 2" (43. 7 cm)
	Depth: 6. 5" (16. 51 cm)
	Weight: 4. 2 lbs (1. 91 kg)
Environmental/Power	Operating Temperature: 41° (5°C) to 104° (40°C)
	Storage Temperature: -4° (-20°C) to 122° (50°C)
	Input Power: 8. 0 W
	Operating Voltage: 100 - 240 VAC
	Power Frequency: 50 - 60 Hz
Supported Hardware	Computer: IBM PC/AT, PS/2 and 100% compatibles
	Video Modes: VGA, SVGA, (XGA, XGA-II with adaptor)
	Maximum Resolution: 1280 x 1024 @ 60 Hz
	Peripherals: PS/2 keyboard, PS/2 mouse, IntelliMouse (PS/2 only)
Agency Approvals	UL 1950, CSA C22. 2 No. 950, EN60950
	FCC part 15A, EN55022, EN50082

Pairing

Pairing connects two SwitchView OSD units serially, allowing access to 16 computers with one keyboard, monitor and mouse without using a computer port. It is used in place of cascading two units. To pair your SwitchView OSD units, use the instructions below instead of those given in the Installation chapter.

Initial Configurations

1. Select one of your two SwitchView OSD units to be used as the slave unit.

2. Connect your VGA monitor cable to the port labeled blue ▢ on the back of this unit. Next, connect your keyboard to the port labeled purple ⌨ on the same unit.
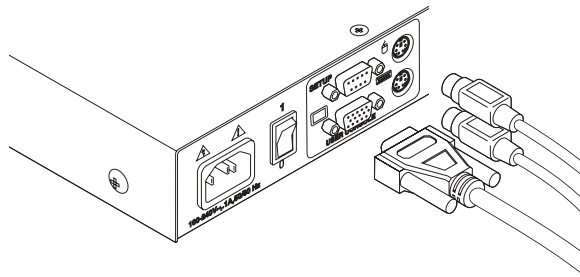
3. Locate the power cord that came with your SwitchView OSD unit. Plug it into the IEC power connector on the SwitchView OSD. Make sure that the SwitchView OSD power switch is off, then plug the other end of the power cord into an appropriate AC wall outlet. This outlet must be near the equipment and easily accessible to allow for unplugging prior to any servicing of the unit.
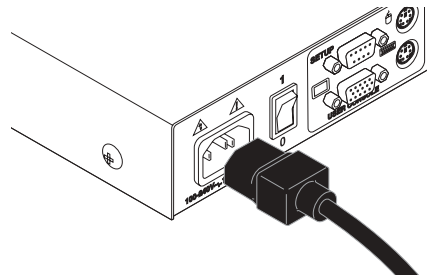
4. Turn the SwitchView OSD unit on and press the **Control** key twice to activate the On-Screen Display system. The Administrator Channel list will appear in a pop-up menu.

5. Press the **Control** key twice more to activate the Administrator Command Menu.

> **Avocent Control Panel**
> **Administrator Command Menu**
>
> Channel Maintenance
> **Administrator Functions**
> Turn Scanning ON
> Scanning Order
> Sequential Scan Dwell Time
> Reset Standard Mouse/Keyboard
> Reset Wheel Mouse/Keyboard
> Version Information
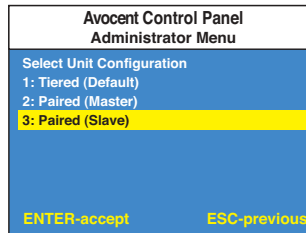>
> ENTER-accept   ESC-previous
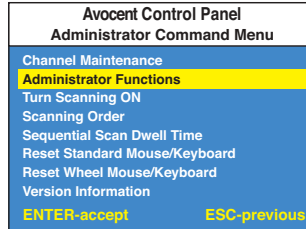
6. Using the arrow keys, highlight 'Administrator Functions' and press **Enter**. This will bring up the Administrator Menu.

7. From here, highlight and select 'Unit Configuration'.

8. Change the unit configuration selection to option 3, 'Paired (Slave)'.

9. Press **Enter** to save your selection. Next, press the **Esc** key repeatedly to exit from the OSD menu.

> **Avocent Control Panel**
> **Administrator Menu**
>
> Select Unit Configuration
> 1: Tiered (Default)
> 2: Paired (Master)
> **3: Paired (Slave)**
>
>
>
> ENTER-accept   ESC-previous

10. Power down the slave SwitchView OSD unit and disconnect the keyboard and monitor.

11. Repeat Steps 2-7 with the remaining master SwitchView OSD unit.

12. Now, choose option 2, 'Paired (Master)' for this unit. Press **Enter** to save the selection and then press **Esc** repeatedly to exit the OSD menu.

13. Power down the master unit and disconnect the monitor.

Pairing Connections

1. Locate the pairing cable kit. (CDUAL) It will contain a Y-video cable with two 15-pin male VGA connectors and one 15-pin female VGA connector. It also contains a 9 pin male serial cable.

2. Plug a male VGA connector into the port labeled □ on each of the SwitchView OSD units.

3. Connect the female VGA cable to the end of your monitor cable.
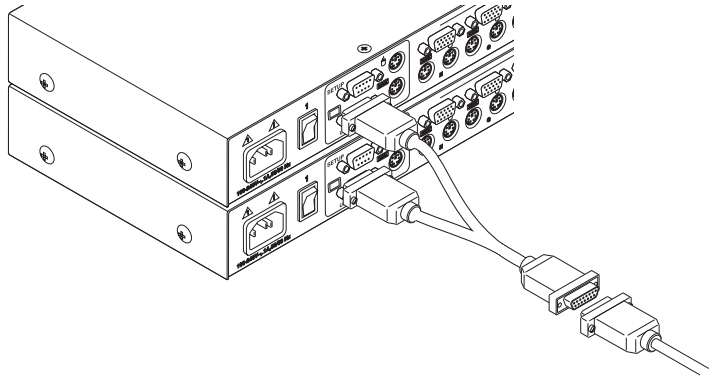
4. Next, connect the serial cable between the ports labeled "SETUP" on the SwitchView OSD units.

5. Connect a PS/2 mouse to the master SwitchView OSD unit.
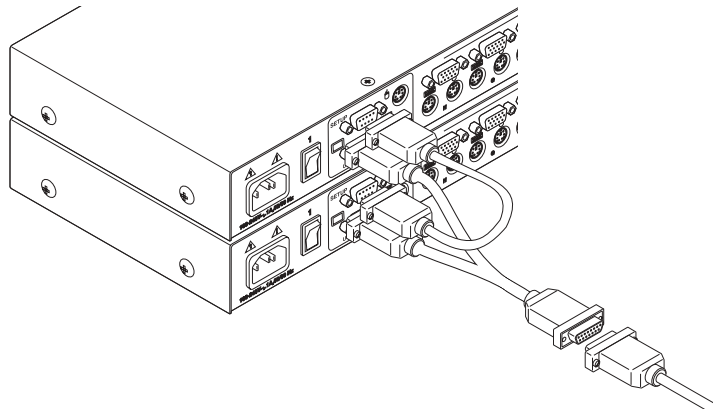
Connecting Computers to the SwitchView OSD

1. Power down the computers that will be part of your SwitchView OSD system. Make sure that both of your SwitchView units are turned off.

2. Locate your first expansion cable. There will be one 6-foot cable ending with three connectors on each end: one 15-pin "HDD" for your video, one 6-pin miniDIN connector for a PS/2 keyboard connection, and one 6-pin miniDIN connector for a PS/2 mouse connection.

   Choose an available port, labeled A-H, on the rear of your SwitchView OSD unit. Plug the video expansion cable connector into the blue ▢ port of your chosen channel. Plug the PS/2 keyboard expansion cable connector into the purple ▦ port. Plug the mouse expansion cable connector into the appropriate green ⬛ port.

   Plug the remaining ends of the video, PS/2 keyboard and mouse expansion cables into the matching ports on your computer.
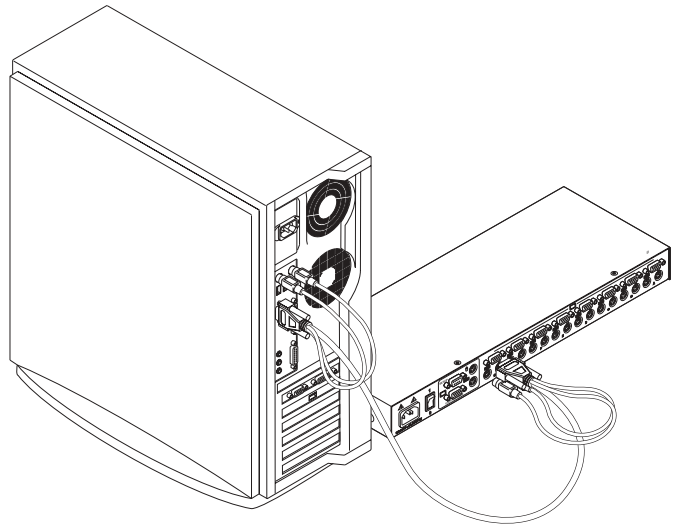
3. Locate your next input cable. Repeat step 2 with all the computers that will be attached to your master SwitchView OSD. Next, attach the remaining computers to the slave SwitchView OSD.

4. Locate the power cords that came with your SwitchView OSD units. Plug each one into the IEC power connectors on the SwitchView OSD units. Make sure that the power switches are off, then plug the other end of the power cords into appropriate AC wall outlets. This outlet must be near the equipment and easily accessible to allow for unplugging prior to any servicing of the unit.
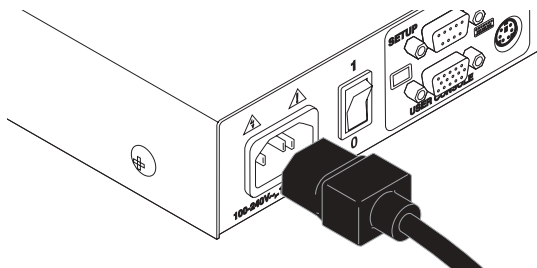
5. Power-up your slave SwitchView OSD first followed by your master SwitchView OSD, then all attached computers.

The SwitchView OSD and all attached computers should be powered down before servicing the unit. Always disconnect the power cord from the wall outlet.

Adding New Channels with Paired Units

1. Select 'Add Channel' from the Channel Maintenance Menu. Type in a new channel name, up to 14 characters long, and press **Enter**.

2. At the next prompt, type in the letter "A" if the PC is attached to the master unit or "B" if it is attached to the slave unit. Press **Enter**.

3. When prompted for another cascade level, type **Y** and press **Enter**.

4. Type the letter that corresponds to the computer port that the computer is attached to on the SwitchView OSD and press **Enter**.

5. Type **N** when prompted for another cascade level and press **Enter**.

Press **Esc** at any point to exit this operation without adding a channel.

Note: Keyboard switching is not available on paired units. All other keyboard controls function as described earlier in the manual.

Uninstalling Pairing

1. Press either **Control** key twice to bring up the On-Screen Display Administrator Channel List menu.

2. Press **Control** twice again, select 'Administrator Functions' and press **Enter**.

3. Select 'Unit Configuration' and press **Enter**.

4. Change the unit configuration to 'Option 1, Tiered'.

5. Press **Enter** to save your selection and **Esc** to exit OSD.

6. Disconnect the serial and video cables from both SwitchView units.

7. Attach a keyboard and monitor directly to the slave unit.

8. Repeat instructions 1-5 on the slave unit.

9. The units may now be cascaded together or used separately.

Note: Please note that the channel list will need to be modified according to the Basic Channel Maintenance instructions in the manual after uninstalling pairing.

Troubleshooting

Our Technical Support staff is ready to assist you with any installation or hardware problems you encounter with your Avocent product. If a problem should develop, follow the steps below for the fastest possible service:

1. Check the troubleshooting tables below to see if the problem can be resolved by following the procedures outlined.

2. Call Avocent Technical Support for assistance. Have your Problem Report with you when you call or fax it to Technical Support directly. To expedite assistance, have this manual with you when you call, along with a copy of your invoice giving the date purchased and other identifying data.

Symptom	Action
No status light	Verify unit is turned on. Check power cable. If status light still does not light, turn off the unit and check the fuse located under the power cord connector. If the problem persists, contact Avocent Technical Support.
Red status LED lit	Internal unit failure. Contact Avocent Technical Support.
Green channel LED not lit	Verify that the computer is powered on. Check the cabling between your computer and the SwitchView OSD. Verify that a keyboard works when plugged directly into your PC. If the problem persists, contact Avocent Technical Support.
Unable to hot-key switch to a channel	Verify that no OSD menuing windows are up on your monitor. You must escape from all OSD menus to enable hot-key switching. Verify that you are not in secure mode. (No lock symbol on OSD screen.)
Unable to push-button switch to a channel	Verify that you are not in secure mode. (No lock symbol on OSD screen.) Verify that a computer is attached to that channel. If the problem persists, contact Avocent Technical Support.

Symptom	Action
No video	Verify that the video cable between the PC and the SwitchView OSD is correctly connected. Verify that the monitor cable is correctly connected to the SwitchView OSD.
	Power down the computer. Connect the monitor directly to the computer and power up again. If the monitor operates correctly direct to the computer, contact Avocent Technical Support. If it does not, try another monitor.
Mouse jumps or "hugs" screen	If the mouse has been hot-plugged while running in Windows, you may need to close and restart Windows.
	If the mouse still does not function, try the mouse resynchronization command <ZM>. (For instructions on command mode, see 'Basic Operations'.) If the problem persists, contact Avocent Technical Support.
Mouse is inoperable on one computer channel	If the mouse is inoperable on a channel, try the mouse reset command <MR> or <MW> with that PC selected. (For instructions on command mode, see 'Basic Operations'.)
	Verify that the cables from the computer to the SwitchView OSD are connected properly. Make sure that you have keyboard/mouse privileges for that channel.
	Verify that the mouse driver and application are configured properly for mouse support.
	Verify that the computer works properly with a mouse connected directly to it. If the problem persists, contact Avocent Technical Support.
Mouse is inoperable on all computer channels	Verify that the mouse is plugged into the correct PS/2 port on the back of the SwitchView OSD.
	Verify that the mouse is PS/2 style and a supported brand. (See the 'Product Overview' chapter for more information.)
	Try the mouse reset command <MR> or try the 'Reset standard mouse/keyboard' command from the OSD Command Menu for computers using PS/2 mice. Use <MW> or 'Reset wheel mouse' for computers using the Microsoft IntelliMouse. (For instructions on command mode, see the 'Basic Operations' chapter.)
	Verify that the mouse works when connected directly to a computer.
	Cycle power to the SwitchView OSD unit. (You do not have to power down your computers for this.) If the mouse remains inoperable, power down all attached computers, cycle power on the SwitchView OSD, then repower the computers. If the problem persists, contact Avocent Technical Support.

Symptom	Action
Keyboard is inoperable on one computer channel	If keyboard does not function on one channel, verify that the cables from the computer to the SwitchView OSD are connected properly.
	If you are operating in secure mode, verify your keyboard and mouse privileges.
	Verify that the keyboard works properly connected directly to the computer. If the problem persists, contact Avocent Technical Support.
Keyboard is inoperable on all channels	If keyboard does not work on any channel, try the 'Reset mouse/keyboard' command from the OSD Command Menu.
	Try a different keyboard. If the keyboard still does not function, cycle the power on the SwitchView OSD unit.
	Cycle power on all attached computers and the SwitchView OSD unit and try again. If the problem persists, contact Avocent Technical Support.
Keyboard is inoperable after switching channels	Try changing the keyboard scan set for that channel by using the keyboard command sequence <Kn>. (For more information, see the 'Basic Operations' chapter.)
	If you are operating in secure mode, verify your keyboard and mouse privileges. If the problem persists, call Avocent Technical Support.
Characters on screen do not match keyboard input	Try changing the keyboard scan set for that channel by using the keyboard command sequence <Kn>. (For more information, see the 'Basic Operations' chapter.) If the problem persists, call Avocent Technical Support.
No keyboard, video or mouse on expansion unit; base unit is functioning properly	Verify that the cable connecting the two units together is correctly connected on both ends. (For additional information, see the 'Installation' chapter.) If the problem persists, contact Avocent Technical Support.
OSD menu does not "pop-up"	Verify that you are pressing the Control key twice within one second. If the problem persists, contact Avocent Technical Support.

Symptom	Action
Unable to change channels using OSD	Verify that the channel is powered. Check the address configured in OSD. If the computer is powered and the address is correct, call Avocent Technical Support.
Administrator password is forgotten	Call Technical Support.
User password is forgotten	Contact your system administrator.
General Keyboard/ Video Problems	If the building has 3-phase AC power, ensure that the computer, the SwitchView OSD and the monitor are on the same phase. Best results are obtained when they are on the same circuit. Use only Avocent supplied cable. Avocent warranties do not apply to damage resulting from user supplied cable. Do not use a 2-wire extension cord in any Avocent product configuration. Test AC outlets at computer, SwitchView OSD and monitor for proper polarity and grounding. Use only with grounded outlets at the computer, SwitchView OSD and monitor. When using a backup power supply (UPS), power the computer, SwitchView OSD and the monitor off the supply.
System lockup during paired operation	If there is no keyboard channel selection function, try to bring up the OSD menu. If it activates, reselect your channel and verify that the channel functions normally. If the problem persists, contact Technical Support. If the OSD menu does not activate, verify that the serial cable and video cables are securely attached to both boxes. If not, reattach and try the OSD menu again. If the problem persists, contact Technical Support.

LIMITED WARRANTY

Avocent Corporation warrants to the original retail purchaser that this product is and will be free from defects in materials and workmanship for a period of 24 months from the date of purchase.

Additionally, all Avocent products carry an unconditional thirty-day satisfaction guarantee. If, for any reason, you are dissatisfied with the performance of this product, you may return it to the point of purchase for a refund of the purchase price (excluding shipping charges). This guarantee does not apply to special order products, and may not be available through all resellers. During the warranty period, purchaser must promptly call Avocent for a RETURN MATERIALS AUTHORIZATION (RMA) number. Make sure that the RMA number appears on the packing slip, proof of purchase, AND ON THE OUTSIDE OF EACH SHIPPING CARTON. Unauthorized returns or collect shipments will be refused.

Ship prepaid to: Avocent Corporation
                          4991 Corporate Drive
                          Huntsville, AL 35805 U.S.A.
                          Telephone: (256) 430-4000

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2. If unauthorized modifications were made to product.
3. If unreported damages occurred in any shipment of the product.
4. If damages were due to or caused by equipment or software not provided by Avocent.
5. If the unit is used with non-grounded or incorrectly polarized AC power.
6. If the product is used in contradiction to any instruction provided by any User Guide or Instruction Sheet provided to you or with the product.
7. If the product is damaged due to power surges, water exposure or act of God including lightning.

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